

REMARKS/ARGUMENTS

By the *Office Action* of 11 February 2011, Claims 1 and 4-27 are pending in the Application, and all rejected. Applicant thanks Examiner with appreciation for the careful consideration and examination given to the Application.

Applicant submits this *Response and Amendment* solely to facilitate prosecution. As such, Applicant reserves the right to present new or additional claims in this Application that have similar or broader scope as originally filed. Applicant also reserves the right to present additional claims in a later-filed continuation application that have similar or broader scope as originally filed. Accordingly, any amendment, argument, or claim cancellation presented during prosecution is not to be construed as abandonment or disclaimer of subject matter.

By the present *Response and Amendment*, some of the Claims are clarified. No new matter is believed presented, and all pending Claims believed allowable.

1. The Claim Rejections

Claims 8-21 are rejected under 35 USC 112, second paragraph, as allegedly being indefinite. Claim 8 is clarified to make it clear that the interlayer material is indeed the same as the “moisture-absorption element,” as the Examiner assumed.

Claims 1, 4-10, 13-14 and 18-27 are rejected under 35 USC 103(a) as allegedly being unpatentable over Goyarts (CA 2413921) in view of Mesek et al. (US 4045833). Claims 1, 4-10, 13-14 and 18-27 are rejected under 35 USC 103(a) as allegedly being unpatentable over Goyarts in view of Levy (US 5114418) and further in view of Mesek et al. Claims 11-12 and 15-17 are rejected under 35 USC 103(a) as allegedly being unpatentable over Goyarts in view of Mesek et al., and further in view of McIntyre (US 4911948). Claims 11-12 and 15-17 are rejected under 35 USC 103(a) as allegedly being unpatentable over Goyarts in view of Levy and Mesek et al., and further in view of McIntyre.

Goyarts does not disclose, teach or suggest that each adjacent layer is joined by an adhesive composition in the form of a pattern, as recited in the independent Claims 1, 8 and 22. As such, and as none of the additional cited art cure this deficiency, it is respectfully submitted that the Examiner has not provided *prima facie* case of obviousness.

The present invention has an adhesive composition in the form of a pattern in between both the moisture-permeable top layer material and the moisture-absorption element, and again between the moisture-absorption element and the moisture-impermeable bottom layer material.

This is not disclosed, taught or suggested by Goyarts as alleged by the Examiner; indeed Goyarts discloses the opposite.

The present invention is an improved multilayer washable material and underpad over Goyarts (same inventor), and is patentably distinct over same, in that at least:

the moisture-impermeable bottom layer material (3) and the at least one layer of a textile material used as a moisture-absorption element (1), on the one hand, *and* the moisture-permeable top layer material (2) having good-moisture permeability and being substantially hydrophobic and the moisture-absorption element (1) on the other hand, *are both* joined by an adhesive composition in the form of a pattern.

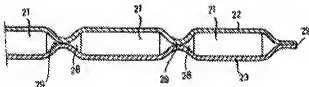
It is respectfully submitted that Goyarts does not disclose, teach or suggest at least this recitation of independent Claims 1, 8 and 22, and, indeed, Goyarts teaches away from this combination. Even if the Examiner disagrees, and believes a *prima facie* case of obviousness has been made, a *prima facie* case of obviousness may be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997). Further, although the Examiner does not utilize the additional cited art to cure this deficiency of Goyarts, the Examiner would not be able to modify Goyarts in such a way as to read on this recitation, as it is improper to combine references where the references teach away from their combination, as Goyarts does in this particular respect.

2. Goyarts

Goyarts discloses two different washable pads, both patentably distinct from the present invention. In one embodiment, a perforated absorption element is used, and the assembly is made by joining the moisture-permeable top layer to the moisture-impermeable bottom layer. As the present invention does not utilize a perforated absorption element, this disclosure is not relevant. In an alternative embodiment, Goyarts discloses the layers being joined by one another, for example, by using bonding layers between the layers. However, if the moisture-

absorption element and the top-layer material are joined using a spot coating layer of bonding material, *see, Page 10, Lines 14-27, options (e) or (f)*, then a coating method for the bonding of the moisture-impermeable bottom layer with the moisture-absorption element differs from the spot coating method for bonding together the moisture-permeable top-layer material and the moisture-absorption element. As recited in independent Claims 1, 8 and 22, the present invention is patentably distinct from this method of joining layers disclosed in Goyarts.

Goyarts discloses a pad in which a moisture-permeable top-layer material (22) and a moisture-impermeable bottom-layer material (23) are joined together at certain points via perforations (28) in the moisture-absorption body (21). Goyarts also discloses a method for forming the abovementioned washable pad, and to ways of finishing the border of a washable pad of this nature (*Abstract*).



Applicant appreciates the similarities between the washable pad of Goyarts and the present invention, but there are significant and patentable distinctions that led to the additional filing of the present application.

Goyarts discloses a washable pad of the above type, wherein between two out of the moisture-permeable top-layer material, the moisture-absorption element and the moisture-impermeable bottom-layer material, there is a form of bonding, over at least part of the surface thereof, which differs from the form of bonding between the third out of the moisture-permeable top-layer material, the moisture-absorption element and the moisture-impermeable bottom-layer and one of the above two, or there is no bonding at all, while the moisture-impermeable bottom-layer material is intrinsically moisture-impermeable. *See, Page 2, Lines 6-19*. As one of skill in the art would appreciate, the term moisture-impermeable means that the material is impermeable to moisture without requiring any further treatment.

Goyarts discloses that bonding is present between the moisture-permeable top-layer material and the moisture-impermeable bottom-layer material via perforations, which are present in the moisture-absorption element, in the form of bonding points. *See, Page 3, Lines 11-16*.

This embodiment with perforations, where there is bonding between the moisture-permeable top-layer material and the moisture-impermeable bottom-layer material, differs significantly from the present invention, as discussed below. This embodiment with perforations is provided with a border finish. *See, Page 4, Lines 22+.*

Goyarts further discloses that the moisture-absorption element and the bottom-layer material are bonded together by way of **a layer** of bonding material. The bonding between the moisture-absorption element and the moisture-permeable top-layer material may then be of numerous types. *See, Page 4, Line 37 – Page 5, Line 5.* Again, Goyarts teaches that it is expedient to have a border finish. *See, Page 5, Lines 11-16.*

Goyarts discloses that the join between the moisture-absorption element and the moisture-permeable top layer material may be brought about by bonding the moisture-permeable top-layer material and moisture-absorption element together using, for example, a spot coating layer of bonding material. *See, Page 6, Lines 3-15.*

A method for assembling this embodiment is disclosed, wherein a layer of bonding material is provided over at least part of the surface of the moisture-impermeable bottom-layer. *See, Page 9, Lines 37+.*

The moisture-absorption element and the top-layer material may be joined using a spot coating layer of bonding material. *See, Page 10, Lines 14-27, options (e) or (f).* **However,** Goyarts teaches that if options (e) or (f) are used for the assembly, a coating method that differs from the spot coating method will expediently be selected for bonding together the moisture impermeable bottom-layer material and the moisture-absorption element by means of a bonding agent. *See, Page 10, Lines 28-32.*

The present invention differs significantly from Goyarts, in that the moisture-impermeable bottom-layer material and the moisture-absorption element on the one hand, and the moisture-permeable top-layer material and the moisture-absorption element on the other hand both are joined in the form of a pattern. This is opposite to what Goyarts teaches.

Goyarts teaches that the bonding material that is present in the boundary region between the top-layer material and the moisture-absorption element is generally, if used, present in the form of a spot coating layer, in order to present the minimum possible obstacle to the passage of

moisture from the patient side of the pad to the moisture-absorption element. *See, Page 12, Lines 14-19*). This, the present invention and Goyarts have in common.

Goyarts also teaches that the thermoplastic bonding material that is present as a component of the bottom-layer material may either be present in a spot coating layer or as a completely covering layer. *See, Page 12, Lines 20-22*). However, Goyarts is **not teaching** to use spot coating layers for **both** interfaces at the same time. Goyarts is teaching the opposite.

Importantly, Goyarts teaches that in the latter method, it is also important to ensure a good border finish of the washable pad. *See, Page 13, Lines 1-3*).

In conclusion, Goyarts discloses two different washable pads, both patentably distinct from the present invention. In one embodiment, a perforated absorption element is used, and the assembly is made by joining the moisture-permeable top layer to the moisture-impermeable bottom layer. The present invention does not require a perforated absorption element and this embodiment is therefore not relevant. In an alternative embodiment, Goyarts discloses the layers being joined by one another, for example, by using bonding layers between the layers. However, if the moisture-absorption element and the top-layer material are joined using a spot coating layer of bonding material, *see, Page 10, Lines 14-27, options (e) or (f)*, then Goyarts teaches to use a coating method for the bonding of the moisture-impermeable bottom layer with the moisture-absorption element which differs from the spot coating method for bonding together the moisture-permeable top-layer material and the moisture-absorption element.

3. The Present Invention

The present invention, as recited in the Claims, is a multilayer washable material, wherein the multilayer material is a washable underpad (Claim 1 and those dependent therefrom); a method for producing a multilayer washable material wherein the multilayer material is a washable underpad (Claim 8 and those dependent therefrom); and a washable underpad (Claim 22 and those dependent therefrom). Moreover, the Claims further recites that the layers are joined by a quantity of adhesive composition from 6 to 40 g/m².

Applicant set out to provide an improved washable multilayer material over Goyarts, wherein in the interfacial region between each pair of layers bearing against one another there is an adhesive composition in the form of a pattern which is sufficiently dense to prevent wrinkling,

and which is sufficiently open to prevent the material from becoming inflexible, as recited in independent Claims 1, 8 and 22.

At the same time, in the underpad of the present invention, the moisture-impermeable bottom layer material is joined to the moisture-absorption element in the form of a pattern, as recited in independent Claims 1, 8 and 22. This prevents the underpad from slipping with respect to the mattress on which it rests.

Additionally, in response to the Examiner's statement that the present claims broadly recite "moisture-permeable top layer material"; "moisture absorption element", and "moisture impermeable bottom layer," independent Claims 1, 8 and 22 have been further clarified to recite that the moisture-permeable top layer material **has good-moisture permeability and being substantially hydrophobic**, as disclosed in the present application, *US Patent Publication No. 20060198993*, ¶[0022].

4. The Present Invention is Patentably Distinct From the Cited Art

Claims 1, 8 and 22 recite that the interfacial region between each pair of layers bearing against one another there is an adhesive composition in the form of a pattern which is sufficiently dense to prevent wrinkling, and which is sufficiently open to prevent the material from becoming inflexible. Goyarts does not discuss wrinkling, nor does it provide a solution to wrinkling. The spot coating that is used for joining the moisture-permeable top-layer material and the moisture-absorption element is used in order to present the minimum possible obstacle to the passage of moisture from the patient side of the pad to the moisture-absorption element. Using a pattern and an amount that will prevent wrinkling is not mentioned nor suggested in Goyarts, as the inventor at the time of Goyarts did not know what he knew when he filed the present application. Therefore, a person skilled in the art would have had no reason to use the claimed amount of adhesive or the claimed patterns. Wrinkling, on the other hand, is a serious problem and there can be no doubt that bedridden patients will benefit from the improvement.

Claims 1, 8 and 22 recite that the moisture-impermeable bottom layer material is joined to the moisture-absorption element in the form of a pattern. Goyarts recommends using a layer of bonding material, and therefore does not have the advantage of slip-prevention. Slip with respect to the mattress on which the underpad rests may cause folds in the underpad, which will be highly uncomfortable to bedridden patients.

The examiner admits that Goyarts is silent to the type of spot bonding and amount thereof, and Applicant agrees. Moreover, Goyarts teaches away from using spot coating for joining **both** the moisture-impermeable bottom-layer and the moisture-absorption element on the one hand, **and** the moisture-permeable top layer and the moisture-absorption element on the other hand. The present underpad therefore differs from those of Goyarts in that each pair of layers bearing against one another are joined by an adhesive composition, wherein the adhesive is present in the form of a pattern, and wherein the adhesive is present in a certain quantity. This provides benefits in the form of the prevention of wrinkling and the prevention of slip, which are not found or suggested in Goyarts.

Claims 1, 4-10, 13-14 and 18-27 are rejected under 35 USC 103(a) as allegedly being unpatentable over the combination of both Goyarts and Mesek et al., and Goyarts, Levy and Mesek et al. As none of the cited art discloses, teaches or suggests the invention as presently claimed and discussed above, it is respectfully submitted that Claims 1, 4-10, 13-14 and 18-27 are patentable over these combinations.

The Examiner admits that Goyarts is silent to the type of spot bonding and the amount thereof. Applicant respectfully submits that as discussed above, Goyarts further does not disclose that “the layers are joined together by means of an adhesive composition that is disposed between the bottom layer and the absorption element and the top layer and moisture absorption element ... and the composition can be applied as a spot coating” as alleged by the Examiner at Page 3, ¶6 of the *Office Action*. Neither Goyarts and Mesek et al. alone, nor in combination with Levy, cure this deficiency.

Mesek et al. discloses an absorbent bed pad that is not washable. One of skill in the art would appreciate that it is not a washable bed pad, in that paper-making fibers, such as wood pulp fibers or cotton liners, are used in the fabric.

Mesek et al. is not silent to the structure of Goyarts. It discloses that prior art absorbent bed pads had been formed with three components, a liquid-impervious backing sheet, an absorbent structure centrally disposed on the backing sheet, and a water-pervious facing sheet disposed over the absorbent panel. *See, Col. 1, Lines 14-24.* Mesek et al. addresses an alleged problem of the tendency of paper making fibers to dust, and the facing layer that is designed to contain the short fibers from tearing, by providing a bed pad of a different construction - having

a unitary nonwoven fabric having different concentrations of long and short fibers throughout its thickness directly attached to an impervious backing sheet. Mesek et al. therefore teaches away from using a multilayer material that comprises a moisture-permeable top layer material, and thus cannot be combined with Goyarts as the Examiner has done.

A statement that modifications of the prior art to meet the claimed invention would have been “well within the ordinary skill of the art at the time the claimed invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). [R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007), quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).

The mere fact that references **can** be combined or modified does not render the resultant combination obvious unless. *See, KSR*. Further, in *Crocs, Inc. v. U.S. International Trade Commission*, 598 F.3d 1294 (Fed. Cir. 2010), it was held that “[a] claimed combination of prior art elements may be nonobvious where the prior art teaches away from the claimed combination, and the combination yields more than predictable results”

Here, Mesek et al. expressly teaches away from using a multilayer material that comprises a moisture-permeable top layer material, and thus cannot be combined with Goyarts to render the presently-claimed multilayer material obvious.

According to Mesek et al., the impervious backing sheet may be glued to the fabric throughout the interface there between, or the sheet may be extruded directly on to the pulp-enriched face of the fabric. *See, Col. 2, Lines 37-41*. The preformed embossed polyethylene film may be adhered to the pulp-enriched face of the fabric by means of adhesive distributed in either a discontinuous or continuous manner. When the latter type of distribution is utilized, the continuous glue coating between the backing sheet and fabric produces some compacting of the pulp fibers at the face of the fabric, which results in improved wicking action at the lower depth of the fabric so that body fluids may be spread laterally therein. In a similar manner, by

extruding medium density polyethylene onto the pulp-enriched face of the fabric, some compacting of the short fibers is produced. *See, Col. 2, Lines 48-60.*

Mesek et al. discloses that the backing sheet may be adhered to the absorbent fabric layer by bead lines of adhesive. To avoid the formation of voids between the interface of the impervious sheet and the fabric layer, as well as to reinforce the fabric layer, it is desirable that the bead lines be closely spaced so that voids due to separation at the interface between the backing sheet and fabric layer will not be formed when the bed pad is used. It will be appreciated that body fluids, allowed to accumulate on the impervious sheet without being absorbed in the fabric, may flow on the backing sheet and escape from the edges of the pad. *See, Col. 7, Lines 11-20.*

Mesek et al., however, recommends that the fabric layer is adhered to the backing sheet by a **continuous coating of glue**. Continuous coating of glue not only assures that there will be no separation at the interface of the components of this bed pad, but also produces some compacting of the short fibers at the interface, which increases the wicking action of these fibers. This increased wicking provides a transport mechanism for spreading body fluids to an increased area of the bed pad at a plane of the fabric opposite the face which is in contact with the patient.

Mesek et al. therefore does not teach that the amount of adhesive is an optimizable feature as conclusorily alleged by the Examiner. Rather, it teaches to use a continuous coating for the adhesion of the fabric to the impervious backing sheet. This is opposite from the present invention, as claimed.

It is respectfully submitted that contrary to the position taken by the Examiner, it is not the amount of adhesive that affects the fluid absorption and transport, but the resulting compacting of the pulp fibers at the face of the fabric that results in the improved wicking action at the lower depth of the fabric.

As held by the Supreme Court, one of ordinary skill in the art would not have combined Goyarts and Mesek et al. for the reasons above, and further because the wicking action of Mesek et al. is related to the pulp-enriched fabric, and a pulp-enriched fabric cannot be washed.

Insofar as Mesek et al. incorrectly is combined with Goyarts, then this will result in an absorbent bed pad having a continuous coating of glue to adhere the absorbent layer to the

impervious bottom layer. Both disclose this embodiment as preferred. However, that it is contrary to the present invention, and thus clearly teaches away from the present invention.

Additionally, Mesek et al. does not teach anything about fluid absorption and transport through a moisture-permeable top layer into an absorbent element. Indeed, Mesek et al. teaches away from using a moisture-permeable layer. Nothing can therefore be learned as to the amount of adhesive to join the moisture-permeable top layer into an absorbent element.

Neither Goyarts nor Mesek et al., alone or in combination teaches an underpad as presently claimed, and thus a combination of Goyarts and Mesek et al. does not establish a *prima facie* case of obviousness.

Levy cannot be added to this combination of art, if only because, as shown above, Goyarts and Mesek et al. cannot be combined.

Second, even if combined, Claims 1, 4-10, 13-14 and 18-27 are further patentably distinct from this combination of three references, as the Claims are clarified to recite that the moisture permeable top layer material has good-moisture permeability and is substantially hydrophobic. This clarification – being hydrophobic – further distinguishes the underpad of the present invention from the diaper of Levy, which uses terry cloth, and the absorbent bed pad of Mesek et al., which uses a pulp enriched fabric, neither of which is hydrophobic.

Third, even if combined, Levy discloses a durable and reusable diaper comprising a first layer of terry cloth, a second layer of polyurethane film, and a third layer of woven or knit fabric. Although Levy discloses a three-layer diaper, the second layer of polyurethane film and the third layer of woven, or knit, fabric together form a leakage-preventing portion of the diaper, similar to the impervious backing sheet of Mesek et al. Levy does disclose the application of an adhesive between the absorbing element (top element 10) and the leakage-preventing portion of the diaper (element 12). On the other hand, Levy does not disclose the structure of the current underpad. Levy does not disclose the use of an adhesive in the joining of the moisture-pervious top-layer and the absorbing element, since it does not have a moisture-pervious top-layer.

The leak-proof breathable diaper of Levy is made of terry cloth that is joined to a polyurethane film acting as leakage preventing portion of the diaper. The Levy diaper has no moisture-permeable top layer, and therefore does not provide any teaching with respect to the

joining of a moisture-permeable top layer with the absorbing element. Moreover, from a practical point, the Levy diaper will have to have a significant layer of terry cloth to avoid any moist contact (2.0 oz/yd²).

Additionally, the diaper of Levy does not have a hydrophobic top layer such as may be found in the present washable underpad as recited in the clarified Claims. The purpose of a hydrophobic top layer is to create a buffer between a bedridden patient and the absorbing layer. This allows for a stay-dry surface as the two layers, working in concert with each other, each provide unique properties to the package. Although the top layer is hydrophobic, it is not absorbent and wicking. The wicking capability of the moisture-absorption element then draws the fluid away from the surface providing a dry and comfortable environment for the patient. Levy's "terry only" surface/absorber, does not have this capability, so surface dryness, a critical feature, is not present. Therefore, one skilled in the art would not have considered the three layer fabric of Levy for use as bed underpad.

The Examiner alleges that the amount of adhesive applied is an optimizable feature given that the amount of adhesive directly affects the bond strength of the laminate. Applicant respectfully points out that one of ordinary skill in the art would then use a continuous coating of adhesive, as recommended by Goyarts and Mesek et al., which is opposite to the invention of the recited Claims.

With respect to Mesek et al., the Examiner alleges that it teaches that the amount of adhesive used can be varied. Applicant respectfully submits that Mesek et al. clearly prefers a continuous coating, which will result in a compacting of the pulp-enriched fabric, which in turn improves the wicking activity of the diaper. This is much different from "optimizing the amount of adhesive" such that the product does not suffer from wrinkling and has antislip properties.

Contrary to the allegation of the Examiner, not all of the elements are known within the cited prior art. Goyarts does not disclose that each pair of layers of the underpad bearing against one another are joined by an adhesive composition, wherein the adhesive is present in the form of a pattern and a certain quantity that prevents wrinkling and that prevents slip. Levy does not provide a pair of layers comprising a moisture-permeable-top layer and a moisture absorbing element, nor does it provide that this pair of layers bearing against one another is joined by an adhesive composition, wherein the adhesive is present in the form of a pattern and in a certain

quantity that prevents wrinkling and that prevents slip. Mesek et al. provides no motivation to combine the cited references. The advantages described by Mesek et al. relate to the use of a (non-washable) pulp-enriched fabric.

Claims 11-12 and 15-17 are rejected under 35 USC 103(a) as allegedly being unpatentable over the combination of both Goyarts, Mesek et al. and McIntyre, and Goyarts, Levy, Mesek et al. and McIntyre. As none of the cited art discloses, teaches or suggests the invention as presently claimed and discussed above, it is respectfully submitted that Claims 11-12 and 15-17 are patentable over these combinations.

As indicated above, Goyarts in view of Mesek et al., and Goyarts in view of Levy and Mesek et al. do not disclose all the elements of the pending independent Claims. As Claims 11-12 and 15-17 are ultimately dependent from one of same, they are patentable over these combinations. Applicant agrees with the Examiner that McIntyre does not disclose all the features of the presently claimed invention. In fact, even with the combination of McIntyre, not all limitations of Claims 11-12 and 15-17 are disclosed. From a motivation to increase in production and uniformity of the adhesive layers between the pairs of layers bearing against one another of the current underpad, one of ordinary skill would not have concluded to use a screen printing section to coat two separate layers of material; production and uniformity are **not** adversely affected when a full layer is applied rather than by spot coating.

The Examiner alleges that the prior submitted 37 CFR § 1.132 *Declarations of David Schreiner* are insufficient to overcome the rejection of Claims 1 and 4-27 based on Levy and McIntyre. Applicant respectfully disagrees. Applicant has not submitted any comparative data with respect to the Levy reference, since the Levy reference is not about an underpad. It is about a breathable diaper. Moreover, it is about a diaper that does not have a moisture-permeable top layer.

Applicant would therefore not have been able to submit a comparative example based on Levy. Levy does not teach or disclose that the amount of adhesive used to join the moisture-permeable top layer and the absorbent element may be optimized. In fact, that the diaper remains intact after washings is not very surprising; Levy is only adhering layers to the polyurethane film acting as leakage preventing layer. A concern that the adhesive might

adversely impact the passage of the moisture-permeable top layer, or that the moisture-permeable top layer may delaminate, would be strange to Levy.

Applicant has not submitted any comparative data with respect to McIntyre for similar reasons. McIntyre is a secondary document, missing, among other limitations, the use of the screen printing in the preparation of underpads.

Applicant agrees with the Examiner that the examples provided by Applicant are based on a specific set of materials. The set of materials used are the materials disclosed in the patent application. These would be the set of materials one skilled in the art would use, precisely because they are disclosed in the patent application.

While the examples are not limiting the scope of the present invention, in response to this objection, Applicant does herein limit the definition of the “moisture-permeable top layer material”, by indicating that it has good moisture permeability and is substantially hydrophobic. It is respectfully submitted that this further distinguishes the present invention from the diaper of Levy and from the absorbent bed pad of Mesek et al., that use terry cloth and pulp-enriched fabric - that both are hydrophilic.

Nonetheless, Applicant herein presents new Claims 28-33, which are fully supported by the original filing, and commensurate in scope with the prior submitted 37 CFR § 1.132 *Declarations of David Schreiner*, and thus present Claims that are patentable over the cited references.

Assuming a *prima facie* case of obviousness has been established, and thus the burden shifted to Applicant to come forward with arguments and/or evidence to rebut the *prima facie* case, the Examiner must consider rebuttal evidence and arguments presented in the *Specification*, *In re Soni*, 54 F.3d 746, 750, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995), by counsel, *In re Chu*, 66 F.3d 292, 299, 36 USPQ2d 1089, 1094-95 (Fed. Cir. 1995), and by way of an affidavit or declaration under 37 CFR 1.132, e.g., *Soni*, 54 F.3d at 750, 34 USPQ2d at 1687; *In re Piasecki*, 745 F.2d 1468, 1474, 223 USPQ 785, 789-90 (Fed. Cir. 1984).

New Claims 28-33 are now commensurate in scope with factually supported objective evidence provided in the 37 CFR § 1.132 *Declarations of David Schreiner*.

Applicant is pleased to note that the 35 USC 103(a) rejections of Claims 1 and 4-22 based on Hahn and Tolbert are withdrawn. The Examiner notes that Hahn and Tolbert have been overcome with the clarification of “washable underpad”. Upon reconsideration, however, the Examiner finds Levy and McIntyre remain applicable to the present claims.

Levy, similar to Hahn, discloses a durable and reusable diaper. The diaper comprised a first layer of terry cloth, a second layer of polyurethane film and a third layer of woven or knit fabric. Both the first and second layers, and the second and third layers, will be seen to be laminated together with a urethane adhesive. The first layer then serves as the fluid absorbing portion for the diaper, while the second and third layers form a leakage-preventing portion for it. As disclosed in Levy, the terry cloth layer **10** will be in contact with the body of the wearer. In other words, this diaper does not comprise a moisture-permeable top layer.

The product disclosed in Levy is therefore a body-worn device for incontinence that is shaped appropriately to conform to the contour of the body. There is no apparent wicking action disclosed in Levy. The degree of absorbance required defines the “weight” requirement of the diaper.

As mentioned, the terry cloth serves as a fluid-absorbing portion as to urine, fluids, or other moistures and wastes. The wearer will therefore be in contact with a moist terry cloth. In an age where there is significant concern about the comfort of a wearer of a diaper, and in particular the dry feel of the diaper upon use, the product disclosed in Levy is clearly no longer popular. In that it has a top layer that is moist to touch, it clearly teaches away from the present invention as recited in the Claims.

Moreover, the present invention does not concern a reusable diaper, but rather a washable underpad. A washable underpad is not shaped to conform to the contour of a body. Moreover, bedridden patients are lying on the underpad and will therefore exercise force on the underpad. An underpad made from a first layer of terry cloth, a second layer of polyurethane film and a third layer of woven or knit fabric would be disastrous to the health and wellbeing of the bedridden patients. They would be lying in their own urine in a hospital bed.

The Examiner takes the position that Levy clearly shows the effect of interfacial bonding by means of forming cross-hatching or dots of adhesive. Moreover, the Examiner notes that Levy discloses that the diaper is breathable, which implies the diaper has a permeability.

In this respect it is important to notice that the permeability of Levy, if any, is not a moisture permeability. The diaper of Levy is meant to be leak-proof. Levy has as much indicated that the polyurethane film and the woven or knit fabric acting as second and third layer forms a leakage-preventing portion of the diaper. This is therefore clearly moisture-impermeable. The top layer in the underpad of the present invention, on the other hand, is moisture permeable. It also is hydrophobic, whereas the terry cloth of Levy is not.

Therefore, one of ordinary skill in the art would never have considered the three layer fabric of Levy as anything but an out-of-fashion type of diaper, and most definitely would never have considered this three layer fabric for use as underpad.

McIntyre is a secondary reference, teaching a screen-printing method by which special adhesives and coatings may be provided onto a substrate. McIntyre does not teach underpads or the method for making underpads. Indeed, McIntyre is silent on the subject of multilayer washable materials comprising a moisture-permeable top layer, a moisture-impermeable bottom layer and at least one layer of a textile material used as a moisture-absorption element provided between the top layer and the bottom layer. Therefore, one of ordinary skill in the art would not and could not have made an under pad based on the teachings of McIntyre alone.

Additionally, Levy and McIntyre cannot be combined. The diaper of Levy is shaped appropriately to conform to the contour of the body. McIntyre, on the other hand, does not disclose how to screen print a substrate that is shaped appropriately to conform to the contour of a body. A person of ordinary skill in the art would therefore not have combined these two references.

Even so, a combination of Levy and McIntyre would not provide the present underpad. Instead, a fabric would have been produced having a terry cloth that may become moist upon use, and that is in direct contact with the wearer. This is not the underpad of the present invention.

Applicant clarifies the pending independent Claims so as to further distinguish them from the prior art. In particular, the limitation of the moisture-permeable top layer being a hydrophobic material sets it apart from Levy and Mesek et al., where the wearer is in contact with a hydrophilic material.

Also the clarity objection with respect to Claim 8 has been addressed.

It is thus respectfully submitted that the pending Claims are patentable over all the cited references.

5. Fees

This *Response and Amendment* is being filed within six months of the *Office Action*, and more specifically within four months. Thus, a one month extension of time fee payments is believed due.

Additional claims fees are believed due, as the pending claim count as to total number of claims is now 31, although the number of independent claims remain covered under the original filing fee.

Authorization is hereby expressly given to charge any additional fees due via deposit account No. 20-1507.

CONCLUSION

By the present *Response and Amendment*, this Application has been placed in full condition for allowance. Accordingly, Applicant respectfully requests early and favorable action. Should the Examiner have any further questions or reservations, the Examiner is invited to telephone the undersigned Attorney at 404.885.2773.

Certificate of Transmission:

I hereby certify that this correspondence is being submitted by e-filing to the US Patent and Trademark Office in accordance with §1.8 on this date, via the EFS-Web electronic filing system.

/Ryan A. Schneider, Reg. #45083/

7 June 2011

Troutman Sanders LLP
Bank of America Plaza
600 Peachtree Street, N.E., Suite 5200
Atlanta, Georgia 30308-2216
United States
Phone: 404.885.2773
Fax: 404.962.6849

Respectfully submitted,

/Ryan A. Schneider, Reg. #45083/

Ryan A. Schneider
Registration No. 45,083